

USA Patent Application  
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LINK MECHANISM TO DETERMINE  
THE POSITION AND DIRECTION  
Examiner: Greg Binda  
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ABSTRACT OF THE DISCLOSURE

A link mechanism to establish the position of a spherical bearing and the direction of an arm extending from the bearing is provided, which mechanism has a high precision of position and direction determination, does not require strong actuators, and is mechanically easy to accommodate MR compatibility, to be cleanable and to be sterilizable. The link mechanism has: an axial rod; and two spherical bearings to support the axial rod, the two spherical bearings being capable of changing relative positions, wherein the motion of one of the two spherical bearings relative to the axial rod along the axis is constrained, and the other of the spherical bearings can travel along the axial rod.

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